

**REMARKS**

Claims 1-27 are pending in this application with claims 1 – 5, 7 – 10, 12 – 15 and 17 – 27 being amended by this response. The amendments to the claims further clarify and define the present claimed invention. Support for the amendments to the claims can be found throughout the specification and drawing figures and, more specifically, on page 5, lines 13 – 23; page 7, lines 15 – 29; page 8, lines 25 -35; page 13 lines 26 – 28; page 7, lines 19 – 29 and Figure 2. In view of the support for the amendments to the claims found in the specification and drawing figures, Applicant respectfully submits that no new matter is added by these amendments.

**Rejection of Claims 1-5 and 7-27 under 35 USC 102(a)**

Claims 1-5 and 7-27 are rejected under 35 U.S.C. 102(a) as being unpatentable by Boyer et al (U.S. Patent No. 6,208,973).

Amended claim 1 recites a method for determining payment for provision of multiple different services based on predetermined reimbursement rules. The method includes employing a record repository for linking a plurality of different encounters and associated service records of a patient involving receiving different treatment services at different healthcare provider facilities on different occasions separated by a time period of up to at least a week. A first record is received identifying a particular service provided to a specific patient. In response to receiving the first record, the record repository is automatically searched for a record indicating at least one other service provided to the specific patient. An item identifying the particular service is automatically grouped together with an item identifying the at least one other service provided to the specific patient based on predetermined service record allocation rules. A reimbursement record is automatically created identifying grouped items. A reimbursement amount is calculated for the particular service and the at least one other service provided to the specific patient based on a reimbursement contract determining service grouping affects reimbursement amount. For the reasons presented below, Applicant respectfully submits that Boyer fails to provide any 35 USC 112 compliant enabling disclosure that anticipates the present claimed invention.

The present claimed invention “group[s] records of services provided to a specific patient and provid[es] a consolidated reimbursement claim to a payer” (Page 3, lines 22-24). The claimed arrangement advantageously “recognize[s] that a problem exists in having financial system functions dependent on both administrative

and operational (e.g., clinical) system requirements.” and “[t]he disclosed system addresses this problem by advantageously separating financial system function from administrative and clinical system requirements and constraints” (Page 3, lines 33-37). “The rule-based system efficiently groups services for...one or more encounters...cases or visits into one account for joint reimbursement”(Page 4, lines 31-33). “As an example, assume a contract states that a transplant is reimbursed at a case rate and includes hospital service costs and re-transplant surgery costs...hospital based care costs during a convalescent period of ninety days following transplant...routine outpatient evaluation procedures and testing...as well as certain pre-admission testing. Typically this is performed during at least three patient encounters with the healthcare system, one for pre-admission testing, one for the transplant admission and one for each outpatient visit for testing or evaluation. However, the inventors [of the present claimed invention] have recognized that financially this is advantageously processed using one reimbursement record supporting the reimbursement for the services at the specified single contract rate” (Page 5, lines 13-23).

Unlike the present claimed invention, Boyer provides a method to create “an adjudicated settlement transaction at a point of service which designates the portion of the service to be paid by the third party payor and the portion to be paid by the customer...[T]he point of service terminal creates a purchase transaction which is adjudicated by an adjudication engine substantially in real-time (at the time of service or in a purchase transaction processing batch) to determine a first portion of the purchase which is to be paid by the third party payor and a second portion of the purchase which is to be paid by the customer” (Col. 3, lines 12-27). “While it is desired that the adjudication take place virtually instantaneously so that payment may be completely settled at the point of service at the time of service, “real-time” as used herein is also intended to permit “batch” processing and settlement of the claims processed by the service provider. For example, a healthcare administrative office may settle all of its claims for a given day overnight by batch processing the adjudicated settlement transactions received that day. In such a case, the adjudicated settlement transactions submitted that day may not actually be paid for a day or two” (Col. 5, line 63- Col. 6, line 6).

The Office Action asserts that Boyer anticipates the present claimed invention. Applicant respectfully disagrees. The present claimed invention advantageously recognizes that there are times when multiple bills received from multiple treatment facilities spanning a large time period can be combined into a single bill (see Page 5,

lines 13-23). For example, during a complex surgery such as a transplant, a pre-admission test, transplant surgery and follow-up test can be combined into a single record (Page 6, lines 7-11). Thus, unlike Boyer, the present claimed invention includes “a record repository for linking a plurality of different encounters and associated service records of a patient involving different treatment services at different healthcare provider facilities **on different occasions separated by a time period of up to at least a week**” and “automatically search[es] said record repository for a record indicating at least one other service provided to said specific patient”. The claimed system automatically groups the items together into a single reimbursement record and calculates the amount for the related services. Boyer neither discloses nor suggests these features.

In contrast, Boyer is concerned with a more basic “point of service” reimbursement system for services provided that same day. Specifically, Boyer describe an instantaneous point of care reimbursement system that bundles charges for services performed that day at that specific service location. Thus, Boyer is fundamentally different than the present claimed invention, as Boyer is only concerned with encounters during a **short time period** (one day) and the present claimed invention is concerned with bundling encounters over an extended period (e.g., spanning weeks and months) to encompass treatments that are associated with each other. Additionally, Boyer is fundamentally different than the present claimed invention, as Boyer is only concerned with bundling records from a **single treatment facility**. This is wholly unlike the claimed arrangement which is groups services into a reimbursement record that originates from a **plurality of different treatment facilities**. Boyer does not anticipate the present claimed invention, as Boyer is concerned with a relatively *simple system that combines records from a single service facility at the point of care*. Boyer is a point of care system. This is fundamentally different from the present claimed invention which supports a complex sophisticated system that combines records from multiple patients, multiple encounters and multiple facilities. Specifically, the claimed system supports a healthcare enterprise that may include multiple hospitals, emergency rooms, clinics, same day surgery centers, specialty centers (like lab, radiology, MRI, dialysis, etc.) physician offices, etc., that provide the full spectrum of health services to patients that may have multiple third party insurance policies, each covering some different portion of services provided at one of the respective facilities. The claimed system enables recording of the various inpatient and outpatient services for a given patient at different facilities over an extended period. The claimed system automatically

determines how to organize, bill and calculate expected payment from multiple sources via their user-definable rules.

Therefore, it is respectfully submitted that Boyer neither discloses nor suggests “employing a record repository for linking a plurality of different encounters and associated service records of a patient involving receiving different treatment services at **different healthcare provider facilities** on different occasions **separated by a time period of up to at least a week**” as recited in claim 1 of the present invention. In addition, Boyer is concerned with substantially instantaneous bill processing, or overnight claim batch processing, for example. This is wholly unlike the present claimed invention, which automatically searches for, and groups records in response to the receipt of a first record and searches for any additional record of services provide to the specific patient. Therefore, it is respectfully submitted that Boyer neither disclose nor suggest “in response to receiving said first record, **automatically** searching said record repository for a record indicating at least one other service provided to said specific patient” as recited in claim 1 of the present invention.

In fact, as Boyer is a point of service system that compiles records for patients that have occurred on a specific date at a specific facility, Boyer is unable to operate in a manner equivalent to the present claimed system. Specifically, the claimed system is concerned with “employing a record repository for **linking a plurality of different encounters**” that have occurred at different facilities on different occasions. Once linked in the repository, the claim system advantageously searches the records in the repository **automatically** to locate any other record of service provided to the specific patient on a different occasion. Thus, the claimed arrangement enables **automatic** grouping of related services spanning extended time periods and different facilities into a single “reimbursement claim”. Boyer is unable to perform the claimed search, either manually or automatically, because there is no structure equivalent to the present claimed record repository that links different services for the same patient that were performed at different facilities on different occasions. Instead, as discussed above, Boyer merely concerned with services performed at the same facility on the same occasion. As Boyer fails to provide any 35 USC 112 compliant enabling disclosure of the method claimed in claim 1, Applicant respectfully submits that Boyer does not anticipate the present claimed invention. Consequently, withdrawal of the rejection of claim 1 is respectfully requested.

Claim 2 is dependent on claim 1 and is considered patentable for the reasons presented above with respect to claim 1. Claim 2 is also considered patentable because Boyer provides no 35 USC 112 compliant enabling disclosure of “automatically recalculating said reimbursement amount in response to receiving a second record identifying a further service provide to said specific patient” as in the claimed arrangement. Moreover, the Office Action cites column 8, lines 7 – 24 as providing anticipatory disclosure of the “step of automatically creating a reimbursement record comprises creating a reimbursement record without manual intervention from received records identifying different types of services provided to said specific patient on **separate occasions**” as recited in claim 2. However, nowhere in the cited section of Boyer is there any enabling disclosure of the present claimed features. Specifically, the cited section fails to describe grouping of patient services that occur on separate occasions at different facilities. In fact, a system such as the one claimed, would operate in direct contrast to point of service treatment of Boyer which occurs on one occasion at one place, the point of care. The Boyer system describes the patient services being rendered, adjudicated and paid, all while the patient is at the healthcare provider who rendered the service. This is fundamentally different from the present claimed system which “employ[s] a record repository for linking a plurality of different encounters and associated service records of a patient **involving receiving different treatment services at different healthcare provider facilities on different occasions** separated by a time period of up to at least a week”. Thus, the claimed system creates a “reimbursement record” that includes services occurring over a period of time and at various treatment settings and facilities that are evaluated and regrouped into reimbursement records that reflect the way the patient’s payers will pay them. Boyer neither discloses nor suggests these features. Consequently, withdrawal of the rejection is respectfully requested.

Claim 3 is dependent on claims 1 and 2 and is considered patentable for the reasons presented above with respect to claims 1 and 2. Claim 3 is also considered patentable because Boyer fails to disclose or suggests that “said different treatment services comprise an outpatient service and an inpatient service”. The Office Action cites column 6, lines 23 – 28 and column 12, lines 6 – 11 of Boyer as disclosing the present claimed features. Applicant respectfully disagrees. The present claimed invention, unlike Boyer, combines treatment services received at different locations. While Boyer describes that the system may be accessed from many different locations (see Col. 6, lines 23-28), the system is concerned with a single specific location, the point of care, such that it combines the claims of that location on that day (see Col. 6, lines 1-7). This is wholly unlike the present claimed invention, which is concerned

with combining records for a specific patient of different treatment services performed at different locations into a single reimbursement record. The cited sections of Boyer (and elsewhere) cite examples of different point of service entities and refer to a single instance of service at a single healthcare provider on a specific day. Additionally, the Boyer system, "is accessed by a plurality of product/service providers...In accordance with the invention, **each** such provider has a point of service terminal which accepts a payment system access card....the result of a patient's interaction with the healthcare provider is a healthcare transaction **which generally includes a claim for payment...**". This is fundamentally different from the claimed system because Boyer merely describes a point of service environment and does not enable creating a reimbursement record for a specific patient which includes different services performed at different healthcare provider locations that were performed at different times over an extended period. Therefore, it is respectfully submitted that neither disclose nor suggest that "said different treatment services comprise an outpatient service and an inpatient service" as recited in claim 3 of the present invention. Consequently, withdrawal of the rejection of claim 3 is respectfully requested.

Claim 4 is dependent on claim 1 and is considered patentable for the reasons presented above with respect to claim 1. Claim 4 is also considered patentable because Boyer, contrary to the assertion in the Office Action, neither discloses nor suggests the present claimed feature. The Office Action asserts that Boyer discloses the principles of the present invention as embodied in claim 4. The present claimed invention automatically searches for records associated with multiple patients for particular types of service (such as mother and baby) (see Page 7, lines 19-21). In contrast, Boyer is only concerned with the **records of a single patient** that occur at the specific facility. This is wholly unlike the present claimed invention, which is concerned with the **records of multiple patients** based on the predetermined allocation rules. Therefore, it is respectfully submitted that neither disclose nor suggest that "said record repository links a plurality of different encounters of a plurality of different patients" and "in response to receiving said first record **automatically** searching said record repository for a record indicating at least one other service provided to said specific patient and a different patient" as recited in claim 4 of the present claimed invention. Additionally, Boyer neither discloses nor suggests "**automatically** grouping an item identifying said particular service together with an item identifying said at least one other service in response to identifying linked records of said specific patient and said different patient" using the "record repository" linking "a plurality of different encounters and associated service records"

as recited in claim 4. Consequently, withdrawal of the rejection of claim 4 is respectfully requested.

Claim 5 is dependent on claim 1 and is considered patentable for the reasons presented above with respect to claim 1. Claim 5 is also considered patentable because Boyer provides no 35 USC 112 compliant enabling disclosure in column 8, lines 7 – 24 (or elsewhere) that “said reimbursement contract comprises healthcare policy covering said specific patient” and “automatically analyzing data representing said reimbursement contract to identify rules to be used in grouping services for reimbursement and automatically applying identified rules in grouping said item identifying said particular service together with said item identifying said at least one other service”. The cited section of Boyer merely provides a system that determines “whether the transaction is reimbursable” and “to price the amount by which the healthcare provider is to be reimbursed based on the healthcare transaction or claim”. This is fundamentally different from the claimed invention because Boyer neither discloses nor suggests analyzing a patient specific healthcare reimbursement contract to create rules which are “automatically applied...in grouping” healthcare service items for a specific patient that were provided at different facilities at a different time. Unlike the claimed system, Boyer is merely concerned with grouping the daily claims at a particular point of service. Consequently, withdrawal of the rejection of claim 5 is respectfully requested.

Claim 6 is dependent on claim 1 and is considered patentable for the reasons presented above with respect to claim 1. Consequently, withdrawal of the rejection of claim 6 is respectfully requested.

Independent claim 7 recites a user interface supporting a method for determining payment provision of multiple different services based on predetermined reimbursement rules. Independent claim 7 is considered patentable for the reasons presented above with respect to claim 1. Consequently, withdrawal of the rejection of claim 7 is respectfully requested.

Claim 8 is dependent on claim 7 and is considered patentable for the reasons presented above with respect to claims 1 and 7. Claim 7 is also considered patentable for the reasons presented above with respect to claim 2. Claim 8 is also considered patentable because Boyer, in column 8, lines 7 -24 merely describe calculations performed by the adjudication engine. There is no 35 USC 112 compliant enabling

disclosure of a “user interface” as claimed in claim 8. Consequently, withdrawal of the rejection of claim 8 is respectfully requested.

Independent claim 9 recites a method for use in billing for provision of multiple different services based on predetermined reimbursement rules. Independent claim 9 is considered patentable for the reasons presented above with respect to claim 1. Consequently, withdrawal of the rejection of claim 9 is respectfully requested.

Claim 10 is dependent on claim 9 and is considered patentable for the reasons presented above with respect to claims 1 and 9. Claim 10 is also considered patentable for the reasons presented above with respect to claim 2 which are incorporated herein by reference. Additionally, claim 10 is considered patentable because the section of Boyer (col. 6, lines 48-55) cited in the Office Action, describes a system that is wholly unlike and unrelated to the present claimed system. The cited section of Boyer describes a co-branding arrangement which is related to the payment system access card whereby various insurance companies would contract with credit card like service arrangement to pay for the services. This feature of Boyer has nothing to with “automatically calculating a reimbursement amount” using “predetermined allocation rules” as recited in the present claimed invention. Consequently, withdrawal of the rejection of claim 10 is respectfully requested.

Claims 11 and 12 are dependent on claim 9 and are considered patentable for the reasons presented above with respect to claims 1 and 9. Consequently, withdrawal of the rejection of claims 11 and 12 is respectfully requested.

Claim 13 is dependent on claims 9 and 12 and is considered patentable for the reasons presented above with respect to claims 9 and 12. Claim 13 is also considered patentable for the reasons presented above with respect to claim 3 which are incorporated herein by reference. Consequently, withdrawal of the rejection of claim 13 is respectfully requested.

Claims 14 and 15 are dependent on claim 9 and are considered patentable for the reasons presented above with respect to claims 1 and 9. Consequently, withdrawal of the rejection of claims 14 and 15 is respectfully requested.

Claim 16 is dependent on claim 9 and is considered patentable for the reasons presented above with respect to claim 9. Claim 16 is also considered patentable because Boyer in column 8, lines 56 – 67, fails to provide any 35 USC 112 compliant



enabling disclosure of the present claimed feature. Boyer fails to describe an equivalent way that the claimed reimbursement and billing rules are used to automatically search for other services provided to a specific patient in other visits that must be billed and reimbursed together. Boyer describes a Healthcare History Database that collects services, HCTs and medical data related to the patient, and is used by the rules processor to "...execute algorithms that pertain to the conditions that exist in the Policy Database. In many cases the healthcare history gives overriding information that enables the rules processor to reimburse a healthcare transaction that otherwise would not be reimbursable based on current conditions". This describes the way data may be used to determine if current services are covered and/or are reimbursable. Boyer neither discloses nor suggests grouping services together with the current services to calculate reimbursement. In Boyer, an HCT is something that has already been paid, not something that is still being evaluated for payment. Therefore, Boyer neither discloses nor suggests a system equivalent to the present claimed system. Consequently, withdrawal of the rejection is respectfully requested.

Independent claim 17 recites a method for use in billing for provision of multiple different services based on predetermined reimbursement rules. Independent claim 17 is considered patentable for the reasons presented above with respect to claims 1 and 2. Consequently, withdrawal of the rejection of claim 17 is respectfully requested.

Claim 18 is dependent on claim 17 and is considered patentable for the reasons presented above with respect to claim 17. Claim 18 is also considered patentable because Boyer neither discloses nor suggests "preparing a bill including said reimbursement amount for said particular service and additional service for communication with a payer" as in the claimed arrangement. The present claimed invention is concerned with "grouping records of services provided to a specific patient and providing a consolidated reimbursement claim to a payer" (Page 3, lines 22-24). In contrast, Boyer is concerned with a virtual real-time billing system. In the Boyer system, the funds are first debited from the cardholder's credit account (see Boyer, Figure 3, Step 104) and then later a statement is sent to the cardholder detailing the funds withdrawn (see Figure 3, Step 114). Thus, Boyer is fundamentally different from the present claimed invention, as Boyer first charges the payer and then sends a statement. In contrast, the present claimed invention prepares a bill with an amount to be reimbursed to deliver to the payer wherein the amount is calculated based on the different services provided to the patient at different healthcare provider

facilities on different occasions separated by a time period of up to at least a week. Therefore, it is respectfully submitted that Boyer neither discloses nor suggests “preparing a bill including said reimbursement amount for said particular service and additional service for communication to a payer” as recited in claim 18 of the present claimed invention. Consequently, withdrawal of the rejection of claim 18 is respectfully requested.

Claims 19 – 22 are dependent on claim 17 and are considered patentable for the reasons presented above with respect to claims 1 and 17. Consequently, withdrawal of the rejection of claims 19 – 22 is respectfully requested.

Independent claim 23 recites a method for determining payment for provision of multiple different services to a patient based on predetermined reimbursement rules. Independent claim 23 is considered patentable for the reasons presented above with respect to claim 1. Consequently, withdrawal of the rejection of claim 23 is respectfully requested.

Claim 24 is dependent on claim 23 and is considered patentable for the reasons presented above with respect to claims 1 and 23. Claim 24 is also considered patentable for the reasons presented above with respect to claim 2 which are incorporated herein by reference. Consequently, withdrawal of the rejection of claim 24 is respectfully requested.

Claim 25 is dependent on claim 23 and is considered patentable for the reasons presented above with respect to claims 1 and 23. Claim 25 is also considered patentable because Boyer fails to provide any 35 USC 112 compliant enabling disclosure of the present claimed feature. As described above, Boyer is wholly unlike the present claimed, as Boyer first charges the payer and then sends a statement and the present claimed invention sends to the payer a bill for reimbursement. Thus, it is respectfully submitted that Boyer is not concerned with a reimbursement record as in the present claimed invention. In addition, as described above, Boyer describes an adjudication engine that processes purchase transaction virtually in real-time or during a batch processing operation which takes place overnight or at most a day or two (see Col. 6 lines 1-8). In contrast the present claimed invention understands that purchase transactions that take place over a longer period of time may be advantageously connected and should thus be grouped together for billing purposes. Thus, Boyer is fundamentally different from the present claimed invention, as Boyer is concerned with grouping transactions that take place at a particular point of service provider on a

given day and the present claimed invention groups transactions that takes place at "different healthcare provider facilities on different occasions". Therefore, it is respectfully submitted that Boyer neither disclose nor suggest "said reimbursement record indicates services provided to said patient within a period encompassing at least one of, (a) a plurality of weeks and (b) a plurality of months" as recited in claim 25 of the present claimed invention. Consequently, withdrawal of the rejection of claim 25 is respectfully requested.

Claims 26 and 27 are dependent on claim 23 and are considered patentable for the reasons presented above with respect to claims 1 and 23. Consequently, withdrawal of the rejection of claims 26 and 27 is respectfully requested.

In view of the above remarks and amendments to the claims it is respectfully submitted that Boyer provides no 35 USC 112 compliant enabling disclosure that anticipates the features claimed in claims 1, 7, 9, 17 and 23. As claims 2, 5, 8, 10-12, 14-16, 19-22, 24, 26 and 27 are dependant on independent claims 1, 7 9, 17 and 23, it is respectfully submitted that Boyer also does not anticipate these claims. Thus, withdrawal of the rejection of claims 1 – 27 is respectfully requested.


Having fully addressed the Examiner's rejections, it is believed that, in view of the preceding amendments and remarks, this application stands in condition for allowance. Accordingly then, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the applicant's attorney at the phone number below, so that a mutually convenient date and time for a telephonic interview may be scheduled.

In view of the above amendments and remarks, Applicants submit that the Application is in condition for allowance, and favorable reconsideration is requested.

Respectfully submitted,  
Lynn Hambright et al.

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